

Amendments to the Specification:

Please amend the Abstract as indicated below. A new Abstract is attached herewith to replace the original Abstract.

The present invention combines low density parity checking with parallel equalization channels to enhance data retrieval from tape. Viterbi analysis is done as a precursor to the use of at least one low density parity decoder. A signal decoder may include a plurality of viterbi processors and at least one low density parity check decoder. The decoder may receive a plurality of pulse-shaped signals and produces decoded output signals.